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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/768,560	01/25/2001	Michael Benjamin Ronci		5145

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EXAMINER	
VERBITSKY, GAIL KAPLAN	

ART UNIT	PAPER NUMBER
2859	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/768,560	RONCI, MICHAEL BENJAMIN	
	Examiner	Art Unit	
	Gail Verbitsky	2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 2-8 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 2-8 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION
Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klima, Jr. (U.S. 5997964) [hereinafter Klima] in view of Cranford (U.S. 6281165) and Weiss et al. (U.S. 5830596) [hereinafter Weiss].

Klima discloses in Figs. 1-4 a heat-sensitive thermochromic display/ device (label) attachable to a surface of interest. The device comprises a support layer impregnated with a liquid crystal (thermochromic) layer 16, and, when activated by heating/ predetermined temperature, the layer 16 becoming transparent to light (col. 4, line 54) and an indicia/ mark/ information/ message 12 (HOT) becomes visible/ revealed to the user (as opposed to opaque when cooled). The display also comprises a base/ substrate 14 and an adhesive layer 23 to directly apply/ print the display having the substrate 14 and the adhesive layer 23 onto a surface of interest.

Klima does not explicitly teach that the layer is thermochromic ink, as stated in claim 2. Klima does not explicitly suggest to place the display onto an outer surface of a mug, as stated in claim 2 with the remaining limitations of claims 2-8.

Cranford states that there is a need to measure temperature of a mug, thus, Cranford teaches to apply a thermochromic display to an outer surface of a mug, so as

to assess the temperature of a hot beverage, the as shown in Fig. 1 and as claimed by applicant in claim 2.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to position the thermochromic display, disclosed by Klima onto an outer surface of a mug, as taught by Cranford, so as to allow the user to assess the temperature of the beverage in the mug, especially if the beverage is to be consumed by a child.

Weiss discloses in Fig. 8 a thermochromic display 24, 23 comprising a thermochromic layer 24 covering a mark/ indicia 23. The thermochromic ink goes from colored (opaque) to colorless (transparent) to reveal the mark/ indicia 23 underneath of it when exposed to a predetermined (activation) temperature/ heating from a surface of interest (battery). Weiss teaches that the thermochromic material could be either liquid crystal or thermochromic ink.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the liquid crystal containing thermochromic layer, disclosed by Klima, with the thermochromic ink layer, as taught by Weiss, because both of them are alternate types of thermochromic layers which will perform the same functions, of going from opaque to transparent so as to reveal an underneath indicia upon heating, if one is replaced with the other.

With respect to the particular material to make the vessel, i.e., ceramics, the particular material to make the vessel, absent any criticality, is only considered to be the "optimum" or "preferred" material that a person having ordinary skill in the art at the time the invention was made using routine experimentation would have found obvious to

provide for the vessel disclosed by Klima, Cranford and Weiss since this is very well known type of material commonly used to make vessels (mugs and cups), and since it has been held to be a matter of obvious design choice and within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use of the invention. *In re Leshin*, 125 USPQ 416. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to make the vessel, disclosed by Klima, Cranford and Weiss of ceramic, because ceramic is found to be useful to make cups/ mugs, especially coffee cups because of their slow heating.

Response to Arguments

3. Applicant's arguments, filed January 28, 2005, with respect to claims 2-8 have been fully considered and are persuasive. Applicant's arguments are now moot in view of the new ground(s) of rejection.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art cited in the PTO-892 and not mentioned above disclose related devices and methods.

Newly submitted (faxed to the Examiner) copy of the Declaration Under Rule 131 (October 18, 2004) in support of the priority of the provisional application filed in 2000, is hereby acknowledged. The applicant is requested to formally submit the Declaration Under Rule 131 by mailing or faxing it (central fax # 703/ 872-9306) to the records.

Any inquiry concerning this communication should be directed to the Examiner Verbitsky who can be reached at (571) 272-2253 Monday through Friday 8:00 to 4:00 ET.

GKV *Gail Verbitsky*

Primary Patent Examiner, TC 2800

April 07, 2005

I.